PATENT

C-3003/2

#8
U.J.
7/26/00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF	
CARTER ET AL	GROUP ART UNIT:
SERIAL NUMBER: 09/496,695	EXAMINER: UNKNOWN
FILED: 2 FEBRUARY 2000	DATE:

TITLE: SUBSTITUTED BENZOPYRAN ANALOGS FOR THE TREATMENT OF INFLAMMATION

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR 1.97-1.98

Hon. Commissioner of Patents & Trademarks
Washington, D.C. 20231

Sir:

This Information Disclosure Statement is filed pursuant to 37 CFR 1.97-1.98 as supplemented by MPEP 609. Attached is PTO Form 1449 listing documents believed to be material to the subject matter claimed in the above-identified application of the filing date of said application.

Presentation of these documents listed on PTO Form 1449 is not an admission that any listed document is prior art under the Patent Statutes and the right is reserved to antedate any material described in the listed documents by a showing under 37 CFR 1.131 or otherwise.

The pertinence of each of these documents is summarized below:

Doc. AA describes acid substituted bicyclic moieties as IIb/IIIA antagonists.
Doc. AB describes amide substituted benzopyrans as antifungals.
Doc. AC describes naphthoic acids as lipoxygenase inhibitors.
Doc. AD describes amine substituted benzopyrans as lipoxygenase inhibitors.
Doc. AE describes 2H-benzopyran-3-carboxylic acid as an intermediate for pesticides.
Doc. AF describes 3-phenylbenzopyrans as 5-lipoxygenase inhibitors.
Doc. AG describes 4-oxo-benzopyrans and quinolines as leukotriene antagonists.
Doc. AH describes 4-oxo-benzopyran-carboxylic acids as leukotriene antagonists.

Doc. AI describes 4-oxo-benzopyrans as leukotriene antagonists.

Doc. AJ describes 2-phenyl substituted flavenes and thioflavenes as 5-lipoxygenase inhibitors.

Doc. AK describes benzopyran derivatives as 5-lipoxygenase inhibitors.

Doc. AL describes substituted chromenes and benzothiopyrans as 5-lipoxygenase inhibitors, and specifically 6-benzyloxy-2H-benzopyran-3-carboxylic acid as an intermediate.

Doc. AM describes fused benzo compounds for the treatment of CNS disorders.

Doc. AN describes benzopyran derivatives as tyrosine kinase modulators.

Doc. AO describes 2H-benzopyran-3-carboxylic acid as intermediates.

Doc. AP describes 2H-benzopyran-3-carboxylic acids as intermediates.

Doc. AQ describes substituted chromenes and benzothiopyrans as 5-lipoxygenase inhibitors.

Doc. AR describes benzopyran-3-carboxylic acids.

Doc. AS describes 8-methoxy-benzopyran-3-carboxylic acid as an intermediate.

Doc. AT describes COX-2 in benign and malignant tumors.

Doc. AU describes COX-2 in benign and malignant tumors including lung cancer.

Doc. AV describes COX-2 in benign and malignant tumors including Barrett's esophagus.

Doc. AW describes COX-2 in benign and malignant tumors including skin cancer.

Doc. AX describes expression of COX-2 in airway cells with implication in asthma.

Doc. AY describes the role of COX-2 in angiogenesis.

Doc. AZ describes the role of COX-2 in vascular rejection.

Doc. BA describes the role of COX-2 in HIV induced apoptosis.

Doc. BB describes the role of COX-2 in neurodegeneration.

Doc. BC describes the role of COX-2 in inflammatory bowel disease.

Doc. BD describes the role of COX-2 in cerebral ischemia.

Doc. BE describes the role of COX-2 in hypertension.

Doc. BF describes drugs that inhibit cyclooxygenase and their effect on colon cancer.

Doc. BG describes drugs that inhibit cyclooxygenase and their effect on allergic neuritis.

Doc. BH describes drugs that inhibit cyclooxygenase and their effect on burns.

Doc. BI describes drugs that inhibit cyclooxygenase and their effect on cytomegalovirus infectivity.

Doc. BJ describes drugs that inhibit cyclooxygenase and their effect on lumbago.

Doc. BK describes carboxy coumarinimide derivatives and their antifungal activity.

Doc. BL describes the preparation of 6-chloro-2,3-dihydro-4H-1-benzopyran carboxylic acids.

Doc. BM describes 4-hydroxy-3-quinoline carboxylic acids as starting material in the preparation of antiinflammatories.

Doc. BN describes benzothiopyran acids as starting material in the preparation of

antiinflammatories.

Doc. BO describes the synthesis of 2-hydroxy-1,2-dihydro quinolines.

Doc. BP describes the synthesis of 2[2-morpholino-6-nitrobenzopyran]-3-carboxylate.

Doc. BQ describes the chromene-3-carboxylic acid as an intermediate in the preparation of centrally acting muscle relaxants.

Doc. BR describes the preparation of chromene-3-carboxylic acid.

Doc. BS describes substituted chromenes as 5-lipoxygenase inhibitors.

Doc. BT describes benzothiochromanone as intermediate in the preparation of retinoid-like compounds.

Doc. BU describes benzopyran derivatives as pharmaceuticals.

Doc. BV describes benzopyrans as intermediates.

Doc. BW describes substituted quinoline derivatives.

Copies of the cited documents are enclosed herewith for the Examiner's convenience.

Please charge any fees related to the filing of these documents to Deposit Account No. 19-1025.

Respectfully submitted,

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Form PTO 1449

U.S. Department of Commerce
Patent and Trademark Office

Atty. Docket No.: 3003/
Serial No.:
Applicant: Carter et al
Filing Date:
Group Art Unit::

LIST OF DOCUMENTS CITED BY APPLICANT

U.S. PATENT DOCUMENTS:

*Exmr In.	Document#	Issue Date	Name	Class	Filing Date
AA	5,618,843	April 8, 1997	Fisher et al	514/567	July 8, 1994
AB	5,348,976	Sept. 20, 1994	Shibata et al	514/469	Sept. 7, 1993
AC	5,281,720	Jan. 25, 1994	Young et al	549/13	Jan. 25, 1994
AD	5,447,943	Sept. 5. 1995	Lochead et al	514/337	July 22, 1993
AE	5,004,744	April 2, 1991	Weissmiller et al	514/247	Nov. 22, 1989
AF	4,814,346	March 21, 1989	Albert et Al	514/454	Nov. 4, 1987
AG	4,761,425	Aug. 2, 1988	Girard et al	514/456	Dec. 24, 1984
AH	4,609,744	Sept. 2, 1986	Young et al	549/402	Mar. 19, 1984
AI	5,082,849	Jan. 21, 1992	Huang et al	514/314	July 9, 1990
AJ	4,665,202	May 12, 1987	Rimbault et al	549/402	Aug. 24, 1984
AK	5,250,547	Oct. 5, 1993	Lochead et al	514/337	Aug. 29, 1991
AL	5,155,130	Oct. 13, 1992	Stanton et al	514/456	Oct. 10, 1990
BT	5,728,846	Mar. 17, 1998	Vullgonda et al	549/16	Dec. 12, 1996
BU	5,849,798	Dec. 15, 1998	Charpentier et al	514/456	Mar. 14, 1996
BV	5,869,478	Feb. 9, 1999	Ding et al	514/212	June 7, 1995

FOREIGN PATENT DOCUMENTS:

*Exmr In.	Document#	Public. Date	Country	Class	Filing Date
AM	WO94/13659	23 Jun 1994	PCT	C07D 319/18	8 Dec 1993
AN	WO96/40110	19 Dec 1996	PCT	A61K 31/35	3 June 1996
AO	WO95/07274	16 Mar 1995	PCT	C07D 405/12	1 Sept 1994
AP	WO88/04654	30 June 1988	PCT	C07D 311/58	16 Dec 1987
AQ	EP412,939	13 Feb 1991	EP	C07D 311/58	02 Aug 1990
AR	JP 2-22272	25 Jan 1990	Japan	Abstract enclosed	
AS	JP59-29681	16 Feb 1984	Japan	Abstract enclosed	
BW	WO98/34115	6 Aug 1998			

OTHER DOCUMENTS:

*Exmr In.	Author	Publc. Title	Vol#	Page#	Publc. Date

AT	Sabbaramaiah et al., Proc. Soc. Exp. Biol. Med., 216, 201:1997
AU	Hida et al., Anticancer Res., 19, 775-82:1998
AV	Wilson, Cancer Res., 58, 2929-34:1998
AW	Buckman et al., Carcinogenesis, 19, 723-29:1998
AX	Barnes et al., Lung Biol. Health Dis., 114, 11-27:1998
AY	M. Tsujii et al., Cell, 93, 705-16:1998
AZ	Bustos, J. Clin. Invest., 100, 1150-58:1997
BA	Bagetta et al., Biochem, Biophys. Res. Commun., 244, 819-24:1998
BB	Sandhya et al., Brain Res., 788, 223-31:1998
BC	Singer et al., Gastroenterology, 115, 297-306:1998
BD	Nogawa et al., Proc. Natl. Acad. Sci., 95, 10966-71:1998
BE	Nasjletti, Hypertension, 31, 194-200:1997
BF	Kawamori et al., Cancer Res., 58, 409-12:1998
BG	Miyamoto et al., Neuro Report, 9, 2331-4:1998
BH	Shoup, J. Trauma: inj., Infec., Crit care, 45, 215-21:1998
BI	Speir et al., Circ. Res., 83, 210-16:1998
BJ	Bosch, Curr. Med. Res. Opin., 14, 29-38:1997
BK	Manrao et al., J. Indian. Counc. Chem., 12, 38-41:1996
BL	Loiodice et al, Tetrahdron, 6, 1001-11:1995
BM	Clemence et al., J. Med. Chem., 31, 1453-62:1988
BN	Lazer, et al., J. Med. Chem., 40, 980-89:1997
BO	Bunting et al., Can. J. Chem., 62, 1301-07:1984
BP	Ukhin et al., Izv. Akad. Nauk. Der. Khim., 5, 1222-28:1996
BQ	Gupta et al., Indian J. Chem., 21B, 344-347:1982
BR	Rene and Royer, Eur. J. Med. Chem-Chim. Ther., 10, 72-78:1975
BS	Satoh et al., J. Med. Chem. 36, 3580-94:1993

Examiner: _____ Date Considered: _____

#Examiner - Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO 1449

U.S. Department of Commerce
Patent and Trademark Office

Sheet 1 of 1

Atty. Docket No.: 3003/2
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Filing Date: 2 FEBRUARY 2000
Group Art Unit:

LIST OF DOCUMENTS CITED BY APPLICANT

U.S. DOCUMENTS:

*Exmr In.	Document #	Issue Date	Name	Class	Filing Date
BW	4,046,778	6 Sep 77	Zinnes et al		

FOREIGN PATENT DOCUMENTS:

*Exmr In.	Document #	Publ. Date	Country	Class	Filing Date
BX	WO98/47890	29 Oct 98	PCT		
BY	08,337,583		Japan	Abstract	

OTHER DOCUMENTS:

*Exmr In.	Author	Publc. Title	Vol#	Page#	Publc. Date
BY	Bunting et al, Can.J.Chem., vo. 62, pp. 1301-1307 (1984) pp. 708, 822 (1996)				

Examiner: _____ Date Considered: _____

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#9
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RP

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IN RE APPLICATION OF	
CARTER ET AL	GROUP ART UNIT:
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TITLE: SUBSTITUTED BENZOPYRAN DERIVATIVES FOR THE TREATMENT OF INFLAMMATION

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97-1.98

Commissioner of Patents and Trademarks
Washington, D.C. 20231
Sir:

This Supplemental Information Disclosure Statement is filed pursuant to 37 CFR 1.97-1.98 and MPEP §609. The present Information Disclosure Statement, supplements the Information Disclosure Statement being filed herewith simultaneously. Any fee required by 37 CFR 1.97-1.98 should be charged to Deposit Account No. 19-1025.

This newly cited document is as pertinent as the documents previously cited in this prosecution.

Respectfully submitted,

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